

The Amateur Radio Club of El Cajon

Counterpoise



February 2012



2011 Club Picnic



Join us at
First Lutheran Church
867 S. Lincoln Ave
El Cajon, Ca
Thursday, February 9, 2012
7PM



2012 Officers

President	Steve Weed	KO4QT
Vice President	Nick Prodanavich	AD6UK
Secretary	Karen Hollaway	KJ6DWX
Treasurer	Michael Grogan	KJ6LRB
Past President	Dave Santoro	W6BTS

2012 Board Of Directors	
Dave Ward	KI6GRN
Raymond Boisvert	W1CTM
Daniel Warner	KJ6IOB
Steve St. Martin	KG6VVO
Quinn Lacey	KI6LAT
Tom Walker	KI6ABZ

2012 Standing Committees

Antenna Party: Tom Myrick N6JOJ antennaparty@wa6bgs.us
Awards: Raymond Boisvert W1CTM awards@wa6bgs.us
Counterpoise Editor Tuck Miller NF9T counterpoise@wa6bgs.us
Education: Tom Bryan W5COM education@wa6bgs.us
Estate Sales Tom Myrick N6JOJ estate@wa6bgs.us
Field Day: fieldday@wa6bgs.us
Health & Welfare: health@wa6bgs.us
Historian : historian@wa6bgs.us
Media & PR: Webmaster & CP Editor media@wa6bgs.us
Membership : membership@wa6bgs.us
Photographer: Raymond Boisvert W1CTM photogrpher@wa6bgs.us
Public Service: Don Dodson KI6GZK communityservice@wa6bgs.us
Prizes:
SANDARC Delegate: Steve Weed KO4QT
Alt. Delegate: James Bishop KI6FDW
Social Chair : Teresa Boisvert social@wa6bgs.us
Swap Meet: Tom Myrick N6JOJ swapmeet@wa6bgs.us
Technical: Raymond Boisvert W1CTM technical @wa6bgs.us
WAMO: Raymond Boisvert W1CTM wamo@wa6bgs.us
WA6BGS Trustee Michael Martak AE6CC
WS6F Trustee: Tuck Miller NF9T (needs replaced)
Webmaster : webmaster2@wa6bgs.us

Tuck Miller NF9T



As I write this, it is cold. Actually we are talking about temps right now at 38 degrees. With winds at 22 mph, the wind chill makes it feel like it is actually 27 degrees. Yes, tha

I guess you could say I am one of the “old timers” now in our club, as of August 2011, I have been a proud member for over 20 years. With that, I have experienced like many of you, the hills and the valleys that come with any group. Every group has it’s down time, but having been a member of this club, I know for a fact, that any down time this club might have will turn around. It was, is, and will be one of the premier Amateur Radio Clubs in the San Diego area. I am a proud member.

Even though I live many miles away, I still wanted to be a part of this club. That is why I volunteered for and was appointed the editor of the club newsletter, The Counterpoise. I had been the editor for several years back in the late 90's, and the early part of the 2,000's. When I saw the need for a new editor come up in 2010, I jumped at the chance. You see, I wanted to prove, that even tho I did not actually live in the area anymore, that I could successfully get the job done. I did have a few folks who felt that I was not the person for the job. I am hoping that their opinions have turned around and are happy with the job I have been doing.

(Editor Continued on page 6)

Driving Directions to meeting:

From the West:

Take I-8 East, Exit El Cajon Blvd/Chase Ave. At the end of the ramp, turn right onto Chase Avenue. Go about 1.5 miles to South Lincoln Avenue. Lincoln will be 1 block after Avocado Drive. Turn left on South Lincoln. We are 2 blocks up on the right.

From the East:

Take I-8 West, Exit Mollison Avenue. Go South on Mollison about 2 miles to Washington. Turn right on Washington. Go 1 block and turn left on South Lincoln. We are 1 block up on the left.

ARCEC Counterpoise

The Amateur Radio Club of El Cajon, a group of Amateur Radio operators, interested and active in the service of the Amateur Radio service, publish a monthly newsletter, where members and officers can post information of interest to other members.

Our policy is to print and/or post only information that is related to Amateur Radio, and not items of a political or religious nature, unless it has an impact on Amateur Radio, such as antenna ordinances, etc.

If a member wishes to have printed a topic that is not Amateur Radio related, they can submit a copy to the club newsletter editor, any club officer, and the matter will be discussed and decided upon by the Board of Directors.

No PERSONAL attacks will be allowed.

Submissions are due on the 4th Thursday of each month!!

Amateur Radio Club Of El Cajon

2012 Officers



Steve Weed
KO4QT
President



Nick Prodanavich
AD6UK
Vice President



Michael Grogan
KJ6LRB
Treasurer

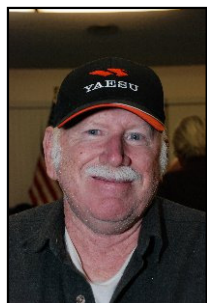


Karen Halloway
KJ6DWX
Secretary



Dave Santoro
W6BTS
Past President

Board of Directors



Dave Ward
KI6GRN



Raymond Boisvert
W1CTM



Daniel Warner
KJ6IOB



Quinn Lacey
KI6LAT



Steve St. Martin
KG6VVO



Tom Walker
KI6ABZ

History of Motorola Car Radio

Submitted by Jim Kouzmanoff K9KUZ

Radios are so much a part of the driving experience, it seems like cars have always had them. But they didn't. Here's the story.

One evening in 1929 two young men named William Lear and Elmer Wavering drove their girlfriends to a lookout point high above the Mississippi River town of Quincy, Illinois, to watch the sunset. It was a romantic night to be sure, but one of the women observed that it would be even nicer if they could listen to music in the car.

Lear and Wavering liked the idea. Both men had tinkered with radios - Lear had served as a radio operator in the U. S. Navy during World War I - and it wasn't long before they were taking apart a home radio and trying to get it to work in a car. But it wasn't as easy as it sounds: automobiles have ignition switches, generators, spark plugs, and other electrical equipment that generate noisy static interference, making it nearly impossible to listen to the radio when the engine was running.

SIGNING ON

One by one, Lear and Wavering identified and eliminated each source of electrical interference. When they finally got their radio to work, they took it to a radio convention in Chicago. There they met Paul Galvin, owner of Galvin Manufacturing Corporation. He made a product called a "battery eliminator" a device that allowed battery-powered radios to run on household AC current. But as more homes were wired for electricity, more radio manufacturers made AC-powered radios. Galvin needed a new product to manufacture. When he met Lear and Wavering at the radio convention, he found it. He believed that mass-produced, affordable car radios had the potential to become a huge business.

Lear and Wavering set up shop in Galvin's factory, and when they perfected their first radio, they installed it in his Studebaker. Then Galvin went to a local banker to apply for a loan. Thinking it might sweeten the deal, he had his men install a radio in the banker's Packard. Good idea, but it didn't work - half an hour after the installation, the banker's Packard caught on fire. (They didn't get the loan.) Galvin didn't give up. He drove his Studebaker nearly 800 miles to Atlantic City to show off the radio at the 1930 Radio Manufacturers Association convention. Too broke to afford a booth, he parked the car outside the convention hall and cranked up the radio so that passing conventioners could hear it. That idea worked - he got enough orders to put the radio into production.

WHAT'S IN A NAME

That first production model was called the 5T71. Galvin decided he needed to come up with something a little catchier. In those days many companies in the phonograph and radio businesses used the suffix "ola" for their names - Radiola, Columbiola, and Victrola were three of the biggest. Galvin decided to do the same thing, and since his radio was intended for use in a motor vehicle, he decided to call it the Motorola.

But even with the name change, the radio still had problems: When Motorola went on sale in 1930, it cost about \$110 uninstalled, at a time when you could buy a brand-new car for \$650, and the

country was sliding into the Great Depression. (By that measure, a radio for a new car would cost about \$3,000 today.) In 1930 it took two men several days to put in a car radio - the dashboard had to be taken apart so that the receiver and a single speaker could be installed, and the ceiling had to be cut open to install the antenna. These early radios ran on their own batteries, not on the car battery, so holes had to be cut into the floorboard to accommodate them. The installation manual had eight complete diagrams and 28 pages of instructions.

HIT THE ROAD

Selling complicated car radios that cost 20 percent of the price of a brand-new car wouldn't have been easy in the best of times, let alone during the Great Depression - Galvin lost money in 1930 and struggled for a couple of years after that. But things picked up in 1933 when Ford began offering Motorolas pre-installed at the factory. In 1934 they got another boost when Galvin struck a deal with B. F. Goodrich tire company to sell and install them in its chain of tire stores. By then the price of the radio, installation included, had dropped to \$55. The Motorola car radio was off and running. (The name of the company would be officially changed from Galvin Manufacturing to "Motorola" in 1947.) In the meantime, Galvin continued to develop new uses for car radios. In 1936, the same year that it introduced push-button tuning, it also introduced the Motorola Police Cruiser, a standard car radio that was factory preset to a single frequency to pick up police broadcasts. In 1940 he developed with the first handheld two-way radio - the Handie-Talkie - for the U. S. Army.

A lot of the communications technologies that we take for granted today were born in Motorola labs in the years that followed World War II. In 1947 they came out with the first television to sell under \$200. In 1956 the company introduced the world's first pager; in 1969 it supplied the radio and television equipment that was used to televise Neil Armstrong's first steps on the Moon. In 1973 it invented the world's first handheld cellular phone. Today Motorola is one of the largest cell phone manufacturers in the world. And it all started with the car radio.

WHATEVER HAPPENED TO....

The two men who installed the first radio in Paul Galvin's car, Elmer Wavering and William Lear, ended up taking very different paths in life. Wavering stayed with Motorola. In the 1950's he helped change the automobile experience again when he developed the first automotive alternator, replacing inefficient and unreliable generators. The invention led to such luxuries as power windows, power seats, and, eventually, air-conditioning.

Lear also continued inventing. He holds more than 150 patents. Remember eight-track tape players? Lear invented that. But what he's really famous for are his contributions to the field of aviation. He invented radio direction finders for planes, aided in the invention of the autopilot, designed the first fully automatic aircraft landing system, and in 1963 introduced his most famous invention of all, the Lear Jet, the world's first mass-produced, affordable business jet.

Sport Sort

Across

1. Internet spec.
4. Word with radiation
9. A contest meth.
14. Wil' Wright's bro'?
15. Acquired relative
16. Icom rig
17. Word with CQ
19. Cut loose
20. Western ham org.
21. Add 50 ohms, say
23. Types of cap.
26. DXCC awd. unit
27. Contester's objective, often
30. The end of CW
31. Amp. opp.
32. FMT unit
35. Wire coating
37. W4 state
38. Market type
39. Rock group calculators?
42. Coalition
43. QRS followers
44. Belonging to W1AW
45. Non-OMs
46. Game piece
47. Dot follower
48. ZL dir. from JA
49. Military address
50. Navigation acronym
52. Cover, as with fabric
56. New Englanders
60. Emit photons
61. Words with Europe or Continents
64. Hidden
65. In the ether
66. PY or CT saint
67. It's clean, in November
68. City in 37-across

69. SWR meter label

Down

1. Kind of hall
2. Gator's cousin
3. Eastern ham org.
4. A hand
5. LA dir. from JA
6. Murphy's work
7. Puts on cargo
8. The America's Cup trophy, e.g.
9. Quick test
10. Ain't right?
11. VE1 first name
12. JA assembly
13. Lot of loot
18. Polarized light disp.
22. Figure of speech

24. Footnote word

25. Officers, and others

27. Like duck feet

28. Collectively

29. Milli-micros?

31. 1996 Olympic flame lighter

32. They're entered in court

33. Makes waves?

34. All together, with en

36. W3 sect.

37. One way to C U on the bands

38. Cone maker

40. Solder target

41. Mike lead-in

46. Hoped-for response to CQ test

47. OK was one

49. Weather balloon unit, with radio

50. 9L ender

51. Affirmative action

52. IRC seller

53. "That was close!"

54. Take on

55. New Yorkers and others

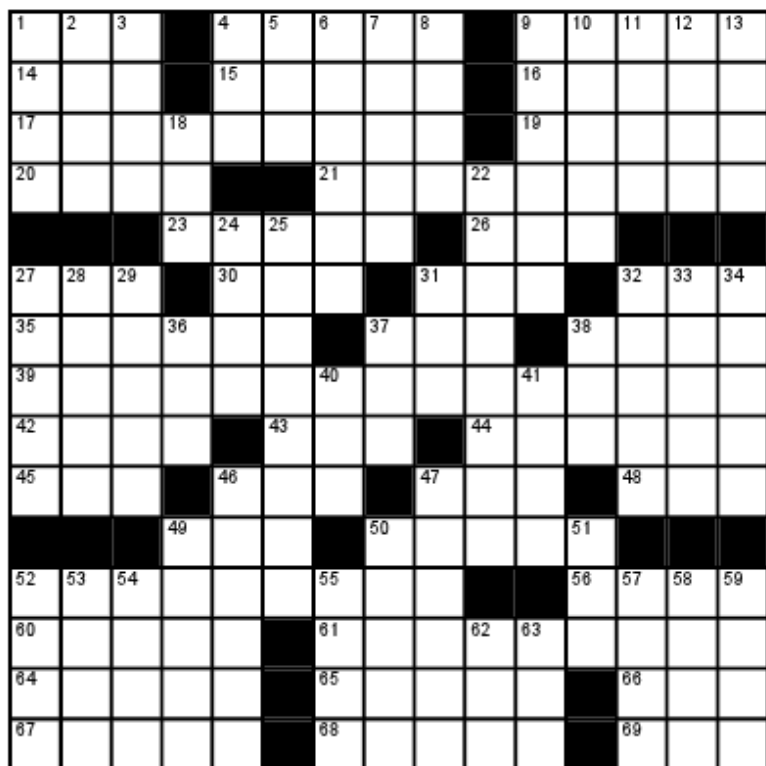
57. Sat. org.

58. Flamboyance

59. Tab target

62. P5 authority

63. Diamond stat



(Editor Continued from page 2)

You will see some changes starting with this issue. I will publish the back ground and print in black and white. There will be some color photo's etc., but if you are one of the few who print the newsletter out, you might want to make sure your settings are for black and white printing, so it will save you money on ink.

I continue to need your help. I want to publish the best possible newsletter each month, but I would love to get more article submissions each month. I need your help. Are you up to the task? I bet you are. I need minutes from both the Board meeting, and the general membership meeting. I need a treasurer's report. A head's up on what the next meeting's program is going to be, and a report telling me who the new members are.

When submitting these reports, please make sure they are contain accurate info. I will read every article for spelling errors, and correct them, and call signs as well, if I know them. Please include the persons full name and call sign.

Please make sure you submit the article by the due date, which is the 4th Thursday of each month. I will start on the newsletter on the Friday following the due date, and will publish it promptly. I want to give people plenty of time to make their plans for upcoming events etc.

One thing I need to mention, even knowing many people already understand that anything I say in my editorial, is my opinion, and not necessarily the opinion of the Board, officers, or even other members of the club.

I will try, for the most part, to be upbeat. This club does not need anything negative, it has had it's share over the past year or so, and as we can see, it is moving forward, and not looking back.

I ask that you give Steve KO4QT your help. I have met him a couple of times, and from what I can see, he also has the best interest of the club at heart. If he needs a volunteer for something, please raise your hand. One person can not do everything. He can only lead.

I hope one day to be able to return to San Diego for a visit, and see my old friends again, and meet yet new ones. Do I miss San Diego, of course I do. Especially this time of the year, when the wind is howling, the roads are freezing over, and the snow is drifting.

I ask that we all work together to keep this club the way it should be. A shining example for all new hams.



Board Happenings

The Board of Director's meet on the 1st Tuesday of each month in the large building behind the Church where the general membership meeting is held on Lincoln Ave., in El Cajon at 7pm.

Every board meeting is open to each member. If you have never been to a board meeting, you are encouraged to attend. Invite another member to attend with you, maybe stopping for a bite to eat on the way. Take an interest in YOUR club.

Recovering our lost members

Do you know members or ex members of the club that haven't been receiving updates from the websites?

If you could send a message and let people that you know, that may be or were members of the club, that they might want to check their spam or junk folders or make sure the club has their correct email address. If they would send a message to KI6UPY at webmaster2@wa6bgs.us, he'll get that corrected promptly.

If anyone knows any member that has lost contact with the club, let's get the club information to that lost member and get them back in the information loop. They can get to us with email, phone call, you name it.

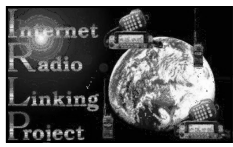
You may rejoin the club by

1. Using the Annual Dues Renewal Reminder -I'll send another one to you in a moment. With this form you have two methods available for renewing or rejoining:
 - a. You can send in the Dues Reminder with payment or
 - b. Use the link provided in the email message (near the top) that will allow you pay using debit card, bank transfer or electronic check.
2. Fill out the online application form
3. Filling out and sending in the application form with dues payment. The form is available here
4. Using the PayPal buttons on the right side-bar of the main website home page.
5. Join us at the next club meeting.

To make it easier for members to contact the officers of the club, e-mail addresses have been set up to go to the mailbox of the person holding that particular position.

President: president@wa6bgs.us
Vice President: vicepresident@wa6bgs.us
Secretary: secretary@wa6bgs.us
Treasurer: treasurer@wa6bgs.us
Counterpoise: counterpoise@wa6bgs.us

Club Phone number is **619 663 6011**



Going Digital

by Tom Wilson KI6ABZ

I spend a lot of time at my computer. I also spend quite a bit of time playing with my radios. Unfortunately, I'm surrounded by mountains, power lines, and computer equipment that generates a lot of RF. Thanks to all that, I simply can't get the good DX at my house.

So what's a guy to do?

As it turns out, I have options: one is Internet linking: the Internet Relay Linking Project (IRLP) and Echolink. Both IRLP and Echolink promise the ability to give people DX through the Internet, rather than relying on atmospheric propagation. This time, we'll talk a little about IRLP. Next month, we'll talk Echolink – including a few words on how to set up your rig to connect to the 'net.

To get started with IRLP, you need to find an IRLP-connected repeater. Locally, you can try KA6UAI on Palomar Mountain: 449.300(-) PL 100. <http://ka6uai.org/> There are IRLP repeaters all over the world; if you want to talk to a specific area, you can see if there's an IRLP repeater there by looking at the IRLP web site: <http://status.irlp.net/>

Once you've got your radio programmed for the repeater, try a quick call to see if things are working. The list of nodes on the IRLP site has a 4 digit number for each node. You can connect to those nodes by just holding the talk button on your radio and entering the 4 digit number for that node. Release the talk button and wait for the connected message. (Be sure to say your callsign first. For example, "KI6ABZ connecting", then press the buttons.)

There are two types of systems you can connect to: Reflectors and Nodes. A Node is a single IRLP station. Reflector is simply a server that lets multiple nodes connect together. If you connect to one of the reflectors, you can actually key up several transmitters all at once, all in different parts of the world.

Once you're connected, listen for a moment and make sure the frequency is clear. Then go ahead and announce your call sign and that you're looking for a conversation.

When you're done, be sure to hold PTT, and tap 73 on your keypad. Don't forget your call sign! (For example: "KI6ABZ Disconnecting", then press 73 and release the PTT.)

You should get an announcement from the repeater that you're disconnected; at that point, you've made your first Internet call on IRLP!

For more information on IRLP, visit <http://www.irlp.net>

That's all there is to making a 'net contact on IRLP!

Club Events Update!!

February

February 4 6AM Swap Meet Santee Drive Inn

February 4 6pm THunt– Grossmont College Parking Lot

February 7 Board Meeting

February 9 General Membership Meeting

February 12 Lincoln's Birthday

February 18 6PM THunt– Grossmont College Parking Lot

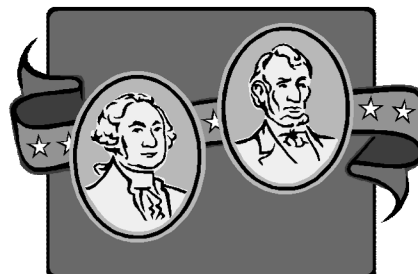
February 20 President's Day

February 22 Washington's Birthday

Club Nets

The Club nets for the ARCEC are:

1. **Monday, 7:00 PM** Donut net. There is a trivia question and general interest topic.
2. **Tuesday, 7:00 PM** Wide Open net run by Frito, N6WKB, a life member of the ARCEC. The Wide Open net is "almost everything goes" and share what you had for dinner.
3. **Wednesday, 8:00 PM** is the WAMO net. Early check-ins start at 7:45 pm.
4. **Thursday, 7:00 PM** is the Frito's 10 meter Net This net is run by Frito, N6WKB, and with guests as net control now and then. Around about 7:30 PM the net moves over to this frequency and continues till about 8 pm.
5. **Thursday, 8:00 PM** San Diego Digital VHF Net on the 6M Band - 50.290 Mhz using PSK31 mode or PKS64. This is a joint event with S D Six Shooters and the Amateur Radio Club of El Cajon.
6. **Saturday, 8:00 PM** Early check-ins start at 7:45 pm.



**President's
Day
2012**

WA6BGS Repeaters

147.420 MHz TX 146.475 MHz Offset .945 MHz

224.080 MHz TX 222.480 MHz Offset 1.60 MHz

445.900 MHz TX 440.900 MHz Offset 5.00 MHz

All WA6BGS repeaters have a pl of 107.2



The **AMATEUR RADIO CLUB OF EL CAJON** Inc.

WA6BGS

Post Office Box Fifty, El Cajon California 92022

Founded 1960 ~ Incorporated 1976

Please fill out this form and see the options at the bottom for Submitting options, all of the information is required for application to be accepted.

PRIMARY APPLICANT

Date of Application:

Amount Paid: ☒ Cash or ☐ Check Check #:

Membership Type: ☐ Individual (\$20) ☐ Family (\$35)

Membership Status: ☐ New ☐ Renewal ☐ Returning Member

Call Sign First Name Last Name WAMO # (If renewing or returning)

ARRL Member: ☐ Yes ☐ No

License Class: ☐ Technician ☐ General ☐ Extra ☐ Other:

Address City State Zip

Email ID Phone

Would you like a member badge? ☐ Yes ☐ No - Free with new membership, 1 per primary applicant

Add Additional Members Here (Family Membership):

First Name	Last Name	Call Sign	License Class	Minor?	ARRL?
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Privacy Options

☐ Do Not Call - Your phone number will be marked as a Do Not Call

Your phone number will not be listed on any publication

To submit this form, you can either print and mail it to P.O. Box 50 El Cajon, 92022

-OR- Click Submit on the right to save it as an FDF file and email it to wa6bgs@wa6bgs.us

Pay with PayPal

Submit to ARCEC

Cash Payments - Get a Receipt from the Club Treasurer. Make all checks payable to AMATEUR RADIO CLUB of EL CAJON, Incorporated.
Receipts for
payments by check will be sent by email or regular mail by the Club Treasurer.
Members with FCC Call Signs are Full Members with voting privileges, Members without FCC Call Signs are Associate members without voting privileges
YOUR DUES ARE TAX DEDUCTABLE: Amateur Radio Club of El Cajon, Inc. is a 501(c)(7) Corporation. Donations are NOT tax Deductable.